



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,014	09/12/2003	Dean R. Shacklett	99-40132-USCON2	8588
7066	7590	09/12/2005	EXAMINER	
REED SMITH LLP 2500 ONE LIBERTY PLACE 1650 MARKET STREET PHILADELPHIA, PA 19103			COLE, ELIZABETH M	
		ART UNIT	PAPER NUMBER	
			1771	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,014	SHACKLETT ET AL.	
	Examiner	Art Unit	
	Elizabeth M. Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 June 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-59 is/are pending in the application.
4a) Of the above claim(s) 1-34 and 43-59 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 35-42 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

Art Unit: 1771

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fokos et al, U.S. patent No. 5361960 in view of DE 4028006, and Campbell, Jr. U.S. Patent No. 5,024,128. Fokos et al '640 teaches an apparatus for cutting printed designs (col. 1, lines 13-16) which are printed on the web at a repeat length (col. 7, lines 4-7) from a web of elastic material such as paper (col. 7, lines 8-10) comprising an unwind station 16 which is fed to an in feed system 30, a die cutting cylinder 76 and a gearbox 85 which controls the position of the cylinder, (col. 9, lines 25-33), first and second sensors which sense the position of the printed designs as well as the position of the die cutting cylinder, (col. 9, lines 46-65), wherein signals are sent from the sensor to the gear box in order to correct the position of the cylinders as well as to the correct for cumulative errors. Fokos teaches that slitting means can be provided in order to separate the webs, (claim 38). Fokos further teaches that the number of sensor may measure the number of errors and correlate it to the rotation of a function cylinder such as the die cutting cylinder in order to perform corrective action on the speed of the cylinders, (col. 9, lines 48-65). While Fokos does teach measuring errors, correlating them to the movement of the die cutting cylinder and sending a correction signal to correct errors, Fokos does not teach sending the correction signal to the in feed station. DE 4028006 teaches that sensor information may also be compiled so that a signal can

also be sent to the in feed station. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have sent correction signals to the in feed station as well as to the cylinders in Fokos, motivated by this expectation that this would lead to more precise cutting and handling of the web. With regard to the number of corrections which must be observed before a signal is sent, Fokos teaches that the number can be increased or decreased, depending upon the accuracy which is desired. See col. 12, line 48- col. 13, line 17.

3. Fokos differs from the claimed invention because Fokos does not teach that the die cutting cylinder's circumference should be greater than the repeat length. Campbell, Jr. teaches that the circumference of the die cutting cylinder should be greater than the repeat length in order to insure that cuts are made at the proper intervals. See col. 3, lines 64-68. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a die cutting cylinder which has a circumference greater than the repeat length in the invention of Fokos. One of ordinary skill in the art would have been motivated to employ a cylinder having a circumference which is greater than the repeat length of the pattern in order to be sure that the cuts were made at the proper interval. With regard to claim 37, since the repeat length of the die cutting cylinder corresponds to the circumference of the cylinder and since Campbell, Jr. teaches that the circumference of the cylinder should be greater than the repeat length of the printed pattern, Campbell, Jr. therefore also teaches that the repeat length of the cylinder is greater than the repeat length of the printed pattern. While Campbell, Jr. does not specify the particular amount by which the cylinder's repeat

Art Unit: 1771

length is greater than the pattern's, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the difference through the process of routine experimentation which produced optimum precision in the cuts which were made.

4. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fokos in view of DE '006 and Campbell as applied to claims above, and further in view of Cox, U.S. patent No. 6,612,570. Fokos differs from the claimed invention because while Fokos disclose broadly a receiving station 18, it does not disclose that it includes a conveyor and a sensor for determining when a certain number of complete items had been placed on the conveyor. Cox teaches that in an apparatus wherein items are cut and stacked employing a variable speed conveyor allows for spaces to be introduced between the stacks of material, (see col. 11, lines 42-45). It would have been obvious to have employed a variable speed conveyor as taught by Cox in the apparatus of Fokos, motivated by the expectation that this would enable separations to be formed between respective stacks of material.

5. Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive. Applicant argues that Fokos does not disclose a braked unwind station having a variable braking tension. However, Fokos teaches at col. 7, lines 45-52: "The system 10 begins with a splicer 28 that feeds the rewound web from the roll 16 to an infeed device 30 having draw rolls that in turn feed the web to the rest of the line of finishing equipment. The infeed device, such as the web guide and infeed sold by MEG as model 640H, sets the tension in the web. The desired value for the web tension is

Art Unit: 1771

selected at the infeed and it varies the web feed rate to maintain the tension at the desired value". "Braked" is defined as something that reduces or stops action. Therefore, Fokos does teach a braked infeed station. The instant claims do not include limitations which further define the structure of the braked infeed station.

6. Applicant argues that the Office action omitted the fact that the circumference of the diecutting cylinder is greater than the repeat length. However, Applicant's attention is directed to paragraph 4 of the previous action which discusses this limitation in detail. Therefore, Applicant's assertion that the Office action omitted to treat this limitation of claim 35 is in error.

7. Applicant argues that the Office Action misinterprets Fokos in having a sensor for sensing the position of the die cutter because Applicant does not deem column 8, lines 45-65 as relevant because this section relates to gluing, drying and perforating and makes no mention of sensors. Applicant is correct and the Examiner apologizes for citing column 8 rather than column 9, lines 45-65. However, the examiner maintains that column 9 does teach sensors which sense the position of the die cutter because column 9, lines 45-65 teaches that the speed of each function cylinder is measured and from the speed the position of the function cylinder can be determined. Fokos states: "For example, if one rotation of the function cylinder corresponds to one repeat length, the number of pulses produced during one complete revolution of the function cylinder equals N. The function cylinders are initially placed in register manually. Thereafter variation in their speed of rotation can maintain that preset registration." Col. 9, lines 56-63. Thus, while as Applicant states, measuring speed is different from sensing the

position, it is the examiner's position that Fokos clearly teaches sensing the position by measuring the speed.

Applicant argues that there is no motivation to make the combination set forth in the office action. Applicant sets forth the titles of the cited art. Applicant's statement "while the German reference and Campbell do not teach other elements of the claimed invention to be in relevant arts" at page 15 of the response is not fully understood. However, the motivation to make the combination is set forth above in the art rejections. In brief, DE '006 teaches that information regarding workpiece deviation can be sent to the infeed station so that corrections can be made there. The motivation to apply this teaching is that this would enable errors to be corrected early in the process. Under Section 103, the obviousness of an invention cannot be established by combining the teachings of the prior art references absent some teaching, suggestion or incentive supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This does not mean that the cited prior art references must specifically suggest making the combination. *B.F. Goodrich Co. v. Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988)). Rather, the test for obviousness is what the combined teachings of the prior art references would have suggested to those of ordinary skill in the art. *In re Young*, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). This test requires us to take into account not only the specific teachings of the prior art

references, but also any inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). Here, the person skilled in the art would have recognized that the teaching of DE '006 regarding sending the data which is obtained through various sensors to the infeed station in order to correct deviations which would lead to errors would also be pertinent to the invention disclosed in Fokos, especially since Fokos teaches controlling the infeed rate of the incoming material at col. 7.

8. With regard to the combination of Fokos and Campbell, Applicant argues that Fokos teaches away from the use of larger cylinders at col. 7. The examiner is unable to find this teaching in Fokos. Fokos appears to teach that the repeat length corresponds to the length of the cylinder, that due to the elasticity of the paper web the expected repeat length is generally different from the actual repeat length and that this results in cumulative errors in the web. However, none of this teaches away from the use of larger cylinders. Campbell clearly teaches the benefit of having the circumference of the die cutting cylinder be greater than the repeat length because this insures that cuts are made at the proper intervals. See col. 4, lines 64-68. Therefore, the motivation to combine the teachings of Fokos and Campbell is found in the Campbell reference itself.

9. Applicant states that the examiner is requested to point out the motivation to combine the references. The motivation to combine the references was set forth in the previous action and is further set forth in paragraph 7 and 8 above. Applicant's comments regarding official notice are not fully understood as the examiner has not

Art Unit: 1771

taken official notice of any facts. The basis for the prior art rejections is clearly set forth and the rejection relies on the cited art, not on judicial notice.

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

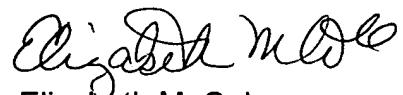
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c